

DIGITAL CAMERA DEVICE PROVIDING IMPROVED METHODOLOGY FOR
RAPIDLY TAKING SUCCESSIVE PICTURES

ABSTRACT OF THE DISCLOSURE

An in-camera two-stage compression implementation is described that reduces the latency between snapshots to a fraction of that otherwise required by other systems that either process complete compression following each snapshot or that incorporate heavy, bulky, and expensive RAM hardware capable of maintaining several raw luminosity records (unprocessed file containing a digital image). In the 1st stage compression the raw luminosity record is quickly, yet partially, compressed to available RAM buffer space to allow a user to expeditiously capture a succeeding image. When the higher-priority processes, the user shooting pictures, and stage one compression subside, a 2nd stage compression, which is slower but more effective, decompresses the earlier partially-compressed images, and re-compresses them for saving in flash memory until they are distributed to a remote platform to be finally converted to the JPEG2000 format.